

IN THE DRAWINGS:

Please replace Figure 1 and Figure 2 with the attached replacement sheets.

REMARKS

The Office Action has maintained the Restriction Requirement imposed in the previous Office Action and has withdrawn Claims 1-37, 39, 49-53, 57, 58, 61 and 62 from consideration. Only Claims 38, 40-48, 54-56, 59 and 60 are examined.

Moreover, the Office Action has objected to the drawings. In addition, the Office Action has objected to the use of the trademark "Aerosil" in the specification. The Office Action has further rejected Claims 38, 40-48, 54-56, 57 and 60 on the ground of non-statutory obviousness-type double patenting, alleging that the subject matter therein is not patentable over Claims 1-17 and 25-30 of U.S. Patent No. 6,416,786 to Muyle in view of the teachings in WO 03/026637, in which Tyebji et al. are inventors ("Tyebji et al."). Moreover, Claims 38, 40-48, 54-56, 59 and 60 are rejected under 35 U.S.C. §103(a) as defining subject matter, which is allegedly unpatentable over Tyebji et al.

Applicant has amended the claims and added claims, which, when considered with the comments hereinbelow, are deemed to place the present case in condition for allowance.

At the outset, before addressing the issues, it is to be noted that applicant has amended Claim 38 by indicating that the lubricant is optionally present. Support is found in Paragraph 54 of the present application. The preamble in Claims 40-48 and 59-60 have been amended to recite that the pharmaceutical composition is a sustained release pharmaceutical composition consistent with the language in Claim 38 upon which the examined claims are dependent. Applicant has also cancelled Claim 39 without prejudice, but has not abandoned the subject matter therein. Applicant reserves the right to re-file the deleted subject matter in this or a continuation application.

Claims 63-72 have been added to the application. Support for Claims 63-70 is found in Paragraph 44 on Page 14 of the instant application. Claim 71 is supported by the disclosure in Paragraphs 40-43 on Pages 12-14 while the subject matter in Claim 72 is supported by the disclosure in Paragraph 42 on Page 13 of the instant specification.

No new matter is added to the application.

Applicant is submitting a corrected drawing sheet of Figures 1 and 2, which removes the dark grey background color therefrom. This submission obviates the objection; withdrawal thereof is respectfully requested.

The specification has been amended to use the term Aerosil® with its trademark and to accompany the same with its generic terminology. Thus, this objection to the specification is overcome.

Pursuant to the obviousness double patenting rejection, the Office Action alleges that Claims 38, 40-48, 54-56, 59 and 60 are unpatentable over Claims 1-17, 25-30 and 45 of Muyle in view of Tyebji et al. The Office Action alleges that the pharmaceutical tablet of Muyle comprise a drug, a sustained release carrier comprising a synergistic combination of a hydrocolloid, such as xanthan gum, and a cellulose ether, such as HPMC, and excipients, such as recited in Claim 10 and lubricant as recited in Claim 17. It refers to Tyebji et al., alleging that its teaches excipients are routinely added to pharmaceutical formulations, and that these include microcrystalline cellulose and dextrans. Thus, the Office Action concludes that it would have been obvious to "include the excipients that are optional in the claims of the '786 [patent] to arrive at the claims of the instant application."

Applicant respectfully disagrees. The subject matter of the present application is patentable over the claims of Muyle et al. in view of Muyle et al. claim, inter alia, a solid

sustained release pharmaceutical tablet for administering to a host, comprising a therapeutically effective amount of a pharmaceutically active ingredient, and a sustained release carrier therefor, said sustained release carrier comprising a synergistic combination of (a) a hydrocolloid selected from the group consisting of xanthan gum, guar gum, and alginic acid or pharmaceutically acceptable salt thereof, and (b) a cellulose ether to retard the release of the pharmaceutically active ingredient, said carrier being present in said formulation in less than about 40% by weight of the tablet, said hydrocolloid and cellulose ether being present in synergistic effective amounts to retard the release of said pharmaceutically active ingredient, said hydrocolloid being present in an amount ranging from about 0.3% to about 7.0% by weight of the tablet and said cellulose ether being present in an amount ranging from 3% to about 20% by weight of said tablet, whereby said cellulose ether is present in the carrier in an amount greater than 50% by weight of the carrier.

However, the claim fails to specifically recite the presence of maltodextrin and a water insoluble or partially water insoluble cellulose and fails to specifically recite the ratio of cellulose to maltodextrin, as claimed.

Tyebji et al. describe several excipients therein. The list starts from Page 14, Line 14 to Page 15, Line 25. They refer to excipients that improve the compressibility, and list a number of excipients that fit this category. They also list excipients that modulate the rate of release of metformin from the core, and these include osmogents, such as osmotic agents, inorganic or organic weak acids and weak bases. Other excipients listed includes surfactants, lubricants, plactizers, disintegrants and the like. Tyebji et al. list several categories of excipients. There is no motivation or suggestion to specifically select any one excipient from the several categories presented. The number of potential excipients that are suggested in Tyebji et al. is enormous.

There is no teaching or suggestion in Tyebji et al. to specifically cull out or refer to maltodextrin in combination with any water insoluble or partially water insoluble cellulose out of the thousands of possibilities. There is thus no motivation to select the combination of maltodextrin and a water insoluble or partially water insoluble cellulose (See, In re Baird, 16 F3d 380 (Fed. Cir. 1996)). Thus, the combination of the claims of Mulye and Tyebji et al. do not teach, disclose or suggest the present invention. Thus, for this reason, the obviousness double patenting rejection is overcome.

Moreover, the Office Action refers to specific excipients listed on Page 14, Lines 14-19, which includes, inter alia, dextrans and silicified microcrystalline cellulose. However, it should be pointed out that this passage does not specifically list maltodextrin. Dextrin refers to a generic class of low molecule weight carbohydrates produced from the hydrolysis of starch. Maltodextrin is but one of a large number of dextrans. There is no teaching of suggestion to specifically utilize maltodextrin therein. Thus, there is no motivation to specifically add maltodextrin to the subject matter recited in the claims of Mulye.

Moreover, Tyebji et al. also refer to the dextrin and the microcrystalline cellulose as being equivalent and as being useful for the compression of the core composition. There is no teaching or suggestion of combining these excipients for improving the compressibility of the core composition, i.e., to add both the dextrin and the microcrystalline cellulose to the composition described and claimed in Mulye et al. Thus, there is no motivation or suggestion to utilize a combination of microcrystalline cellulose and maltodextrin based upon the teaching of Tyebji et al. Since the claims of Mulye do not specifically recite the combination of maltodextrin and a water insoluble or partially water insoluble cellulose, the combination of Tyebji et al. and the claims of Mulye do not suggest a composition wherein both maltodextrin and

the water insoluble or partially water insoluble cellulose are present with the other components listed.

Further, attention is directed to the data in the application and in Figures 1 and 2 of the instant specification and the corresponding text in the specification. For example, attention is directed to Figure 1 and the data in Table 5 in Paragraph 90 in the instant specification, which compares the release profile of a representative composition comprised of, inter alia, metronidazole, Eudragit®, Prosolv® and maltodextrin with the same composition, but without the maltodextrin. As shown in Fig. 1 and the data in Table 5, the amount of drug release was significantly less when maltodextrin was not present. For example, after 7 hours, with respect to the formulation containing no maltodextrin, 76.54% of the drug was released. However, in the composition wherein the representative ratio of cellulose component to maltodextrin, was, e.g., 9:1 and 3:1, the amount released after 7 hours was less than 57%. Thus, there was a significantly slower release of drug in the composition containing all of the ingredients with the above ratios than in the composition where the maltodextrin is not present. Attention is also directed to Table 2 and Fig. 2, which compares the release profile of a representative composition comprised of metformin, xanthan gum, HPMC, Prosolv (silicified microcrystalline cellulose), maltodextrin, Aerosil, magnesium stearate with a second formulation which is identical to the first formulation, except that it does not contain maltodextrin. As shown in Fig. 2, at a representative ratio of silicified microcrystalline cellulose: maltodextrin of 7:1 (14.5% maltodextrin), after 4 hours, about 70% of the drug was released as compared to the composition wherein the maltodextrin was absent, where 85% of the drug was released. Again, when all of the components were present at the representative ratio of maltodextrin: water insoluble cellulose or partially water insoluble cellulose, the % of drug released was significantly slower than when one of the

components was absent. Further, attention is directed to Examples 12 and 13, Comparative Example 4, as depicted in Tables 12 and 13 on Pages 39 and 40 of the instant specification, which compares the release rate of clarithromycin in a formulation containing the drug, glyceryl behenate, Prosolv, maltodextrin, PEG 3350 and Magnesium stearate at a representative ratio of maltodextrin to cellulose of 3:1 and 1:1 with the composition wherein the maltodextrin was absent. At the end of 7 hours, 64% of drug was released in the formulation wherein the ratio was 3:1, 58% of the drug was released in the formulation where the ratio was 1:1 and 93% of the drug was released when no maltodextrin was present. Again when all of the components were present at the representative ratio of maltodextrin to water insoluble or partially water insoluble cellulose, the rate of the release of the drug was significantly slower than when one of the components was not present. These few examples clearly show the unexpected results obtained regarding the release of the drug, where the formulation contains all of the components, as claimed, compared to when one of the components, e.g., maltodextrin, was absent.

Thus, the present formulation represents a patentable departure over the formulation described and claimed in Mulye in view of Tyebji et al. For these reasons, the obviousness type double patenting rejections is obviated; withdrawal thereof is respectfully requested.

In response to the rejection of Claims 38, 45-48, 54-56, 59 and 60 under 35 U.S.C. §103(a), as allegedly unpatentable over Tyebji et al., attention is directed to the Declaration of Nirmal Mulye which is submitted herewith which shows that the subject matter in the elected invention, as depicted in Claim 38 et seq. were completed prior to the filing date of Tyebji et al. in the USA, NAFTA or WTO member country. Thus, Tyebji et al. is not a reference against the present application and thus, this rejection is obviated. Withdrawal thereof is respectfully requested.

Thus, in view of the Amendment to the claims, the Remarks, and the Declaration, it is respectfully submitted that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark J. Cohen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

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